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PATENT APPLICATION: US/09/769,736

DATE; 02/24/2003 TIME: 08:08:08

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             Le Page, Richard WF
             Wells, Jeremy M
             Hanniffy, Sean B
     8 <120> TITLE OF INVENTION: Proteins
     10 <130> FILE REFERENCE: PWC/P21089wo.
C--> 12 <140> CURRENT APPLICATION NUMBER: US/09/769,736
C--> 13 <141> CURRENT FILING DATE: 2003-02-14
    15 <150> PRIOR APPLICATION NUMBER: GB 9816335.5
     16 <151> PRIOR FILING DATE: 1998-07-27
    18 <150> PRIOR APPLICATION NUMBER: US 60/125163
     19 <151> PRIOR FILING DATE: 1999-03 19
    21 <160> NUMBER OF SEQ ID NOS: 212
    23 <170> SOFTWARE: PatentIn Ver. 2.1
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     27 <212> TYPE: DNA
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 Le Page, Richard WF
 Wells, Jeremy M
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<120> Proteins

<130> PWC/P21122WO

<140> PCT/GB99/02452

<141> 1999-07-27

<150> GB 9816336.3

<151> 1998-07-27

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Jon Paper Capir





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Gln Lys Ile Thr Met Ile Thr Phe Thr Phe Gln

1 5 10

Results of Southern blot analysis

All genomic digests and their corresponding Southern blots followed an identical lane order as described in Table I.

5 Table I

l kb molecula r	515 -	A909	SB35	H36B	18RS21	1954/92
Weight Marker	Ia	la	Ть	Ib	п	П

	118/158	97/0057	BM110	BS30	M781	97/0099	3139
***	II	П	Ш	Ш	III	ш	IV

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1169-NT	GBS 6	7271	лм9	Group A Strepococcu	Streptococcu
V	VI	VII	VIII	S	pneumoniae

For comparative purposes, it was decided to analyse the serotype distribution of the GBS rib gene, which encodes the known protective immunogen Rib. Rib has previously been shown to be present in serotype III and some strains of serotype II but not in serotypes Ia or Ib (Stalhammar-Carlemalm et al., 1993). Confirmation of this pattern would not only give increased confidence in interpreting subsequent results, it would also determine if a rib gene homologue was present in the remaining GBS